DOCUMENT RESUME

ED 171 311 IR 007 335

AUTHOR	Jobe, Holly; And Others
TITLE	Creating the Learning Activities Package. Instructional Improvement Through In-Service.
INSTITUTION	Northeastern Educational Intermediate Unit, Scranton, Pa.; Pennsylvania State Dept. of Education, Harrisburg. Bureau of Instructional Support Services.
PUB DATE	75
NOTE	36p.; For related document, see IR 007 365
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Audiotape Recordings; *Audiovisual Aids; Educational Objectives; *Inservice Programs; *Instructional Media; *Material Development; *Production Techniques; Program Evaluation; *Resource Guides; Scripts; Slides; Transparencies

ABSTRACT

This paper describes an in-service course for the design, development, and evaluation of mediated learning activities. Each Learning Activities Package (LAP) has six basic components: concept, rationale, objectives, preassessment, activities, and evaluation. Each of these components is outlined, with emphasis placed on writing objectives (expressing who will do what under what conditions and how well) and developing learning activity options (providing the student with alternatives in instructional presentation). A suggested 5-day schedule is outlined for the planning and production of these LAPs and covers such production techniques as scripting and storyboarding, slide production, transparency development, lettering, laminating and dry press mounting, and audiotape production. (RAO)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

IR

THE PDE/IU #19
MULTI-MEDIA VAN PRESENTS:

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED171311

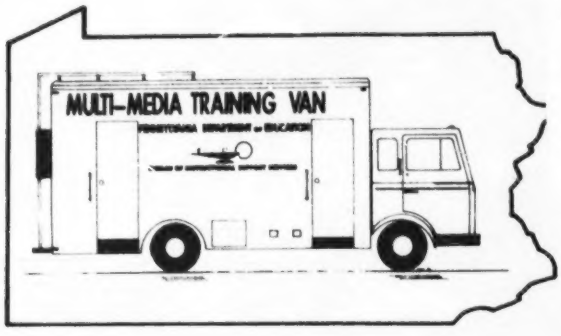
CREATING THE LEARNING ACTIVITIES PACKAGE

Instructional Improvement Through In-Service

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

John Christopher

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."



Holly Jobe
Media Specialist

Glenn Cannon
Media Specialist

Ron Miller
Media Specialist

IR007335

Rationale

For years, teachers have been attempting to individualize their instruction in the classroom. One method of accomplishing this is the use of the Learning Activities Packet (LAP). With the increased use of the LAP there is a need to have a knowledge of the production, selection, utilization and implementation of various forms of media. The media designed, produced, and selected also has to be based on specific objectives as stated in a LAP. The workshop is designed to provide the skills necessary to develop media to meet specific objectives in a LAP.

General Goal

Participants will learn how to design and produce a Learning Activities Package, by actually designing and producing a package appropriate to their subject area and the needs of their students.

Learning Activities Packages

Learning Activities Packages in the form developed by the NOVA schools in Ft. Lauderdale, guide students through a structured program of learning materials. The Learning Activities Packages are frequently used in individualizing instruction.

Although in this course, we will not all be making Learning Activities Packages in the traditional sense, there is a basic system, or process in planning that is useful in developing any instructional materials.

Each Learning Activities Package has six basic components: the concept, rationale, objectives, preassessment, activities and evaluation. In planning a LAP:

1. Choose a CONCEPT or area of coverage for the Learning Activities Package. Narrow it to a simple idea at first.

2. Write a RATIONALE. This is a short paragraph that tells the students how the LAP fits into the curriculum, justifies why the subject is being studied, and tells the student in general terms what he or she can be expected to learn from the package.

3. Write OBJECTIVES. These must be measurable and tell the students how well they are to perform when they finish the package, under what conditions and to what extent they must perform to meet the objectives.

4. Prepare a PREASSESSMENT to determine if the student needs the package. If the teacher is reasonably sure that the material is new, a pretest is not always necessary. The pretest must be based on the objectives.

5. Plan learning ACTIVITIES for each objective. These are the ways for the students to accomplish the objectives. Activities should be multimedia such as a slide/tape program, transparencies, bulletin boards, games, etc. and accommodate a variety of learning styles.

6. In planning for the EVALUATION of the Learning Activities Package, consider student accomplishment on the measurable objectives and the overall performance of the package. These can be evaluated through the pre and postassessments given to the students and a course evaluation form or item analysis of the posttest questions.

In conclusion, your Learning Activities Package should include:

1. A general cover sheet stating the concept.

2. A rationale.

3. Objectives.

4. Pre and postassessments.

5. Activities for the objectives.

6. A method of evaluation.

Program Applicatiens:

Learning Activities Packages can be used to individualize the learning environment by using them in individual learning centers throughout the classroom. The curriculum ideally in this setting would include a series of LAPs that students could progress through at their own individual pace.

Learning Activities Packages can be usefully integrated into the conventional system by providing for:

1. An independent study program.

2. Indepth studies for the gifted students.

3. Remedial activities.

4. Individualized Educational Programs.

Not all LAP activities need to be individualized, they have applications in large or small group situations as well. A multimedia activity could be used as a large group introductory or motivational experience and appear later as an individual activity.

Learning Activities Packages can change the classroom climate. The teacher takes on an advisory role assisting students with their individual experiences rather than the center of the classroom. Students become learners participating actively in their learning experience.

TABLE OF CONTENTS

TOPIC	PAGE
Rationale	1
General Goal	2
Learning Activities Packages	3
Objectives	5
Writing Competencies	6
Behavioral Objectives	8
Activities Schedule	13
Activities	17
Developing Learning Activity Options	18
Evaluation	28
Evaluation Procedures	29
Course Evaluation Form	31

Objectives:

1. Participants will write a rationale for the Learning Activities Package.

2. Participants will write three measurable learning objectives for the Learning Activities Package.

3. Participants will write a short script with titles for either a slide story, 8mm film or video tape.

4. Participants will produce a slide show using ten frames that will include at least one title slide.

5. Participants will produce an audio tape to compliment the slide show.

6. Participants will produce a non-projected graphic (chart, poster, bulletin board, etc.) which demonstrates the principles of design and proper use of color.

7. Participants will use at least three lettering techniques on any of the following: chart, poster, bulletin board, overhead transparency, slide titles, etc.

8. Participants will dry mount at least one photograph or picture.

9. Participants will laminate at least one photograph or picture.

10. Participants will apply a cloth backing or cloth hinge to a graphic or some type of picture.

Transparencies:

11. Participants will produce a handmade transparency on plain acetate.

12. Participants will color enhance an overhead transparency with dry transfer letters, color adhesive, tapes and felt tipped pens.

13. Participants will produce a thermal transparency from a commercially produced master.

14. Participants will produce a thermal transparency from a handmade master.

15. Participants will produce a colorlift transparency from a clay based magazine and mount it.

16. Participants will produce at least one overlay for a transparency and mount it.

WRITING COMPETENCIES FOR IN-SERVICE COURSES

Randall S. Bauer

- 1975 -

Whether they are called objectives, goals, levels of achievement or competencies, the capabilities gained from an instructional program are the only measure of its success.

The 1974 Pennsylvania Competency Board Teacher Education Handbook defines a Competency-Based Teacher Education program as one which specifies the role and role-competencies of the educators being prepared and which has systematic assessment procedures to document the competencies of the people being recommended for certification. The same handbook states that a CBTE program must have demonstrable competencies (knowledge, skills, behavior) which are:

1. derived from explicit conceptions of teacher roles;
2. stated so as to make it possible to assess a participant's behavior in relation to specific competencies; and
3. made public in advance

To write acceptable competency statements for in-service courses, one must ask, "What specific knowledge, skills or behavior will the teacher be able to demonstrate after participating actively in a particular course?"

Another questions logically follows: "How will the writer or instructor know the achieved level of capability unless the course participant is asked to demonstrate the capability?" It is obvious that the evaluation process must be part of the process of competency construction and that correctly written competencies lend themselves to evaluation.

A competency statement must express WHO will do WHAT under certain CONDITIONS and HOW WELL it will be done. As the result of participation in a particular in-service course, competency will be demonstrated by the learner's ability to meet the expected goal of a competency statement.

WHO WHAT

Example: 1. The participant will be able to identify, using

CONDITIONS HOW WELL

any resources at least five local referral agencies which deal with

drug or alcohol problems, abuse or addiction.

WHO WHAT

2. The teachers will be able to devise and operate

CONDITION HOW WELL

a contract system of instruction which enables them to identify what

HOW WELL

work has been completed by each student and includes several methods

for student evaluation.

After participating in a course on values clarification, for example, a competency relating to one's feeling good about oneself is very weak when compared with the individual's being able to list the various changes or reasons for feeling different about him/herself and how these are direct outgrowths of the course.

The instructor should decide on and inform participants of any criterion, standard or minimum acceptable level of achievement for a competency. Likewise, for a competency to state that an "appreciation, understanding or comprehension" will result from a course without substantive demonstration and evaluation is to strain the flexibility of in-service education beyond the point of responsible, minimal learner account ability.

In-service education in Pennsylvania is not a "short cut"; it is an alternative. Competency statements constructed as outlines above insure a structure within which well-planned and well-instituted alternative education can occur.

To summarize, a well-written competency will include:

1. WHO - "teachers," "learner," "participant" or "subject understood."

2. WHAT - "write," "describe," "list," "construct" or "name."

3. CONDITIONS - using aids or references or listing restrictions.

4. HOW WELL - Minimum acceptable standard set by instructor or outgrowth of present level of capability.

Behavorial Objectives

Structure - measurable objectives are precise statements predicting tangible benefits resulting from instructional efforts. The outcomes described imply the tasks ahead, thereby improving the quality of decisions made about procedures necessary to meet those objectives. A precise objective contains three kinds of information:

1. Outcome: a phrase which clearly states the ultimate outcome or tangible benefit of some activity; (what is to be achieved?).

   Below you will find a categorized "shopping list" of outcome verbs which may be helpful in your initial considerations of possible objectives.

SIMPLE TASKS

attend	distribute	omit
choose	duplicate	order
collect	find	place
complete	identify	point
copy	imitate	provide
count	indicate	recall
define	isolate	repeat
describe	label	select
designate	list	state
detect	mark	tally
differentiate	match	tell
discriminate	name	underline
distinguish	note	

STUDY SKILLS

arrange	find	relate
attempt	follow	reproduce
categorize	formulate	return
chart	gather	search
cite	include	signify
circle	itemize	sort
classify	locate	suggest
compile	map	support
consider	organize	underline
diagram	quote	volunteer
document	record	

GENERAL APPLICATIONS

Arts and Crafts:

assemble	grind	rub
blend	hammer	sand
brush	handle	saw
build	heat	sculpt
carve	illustrate	sew
color	make	shake
construct	melt	sharpen

Arts and Crafts Con't.

crush
cut
dab
dot
draw
drill
finish
fit
fix
fold
form
frame
mend
mix
mold
nail
paint
paste
pat
position
pour
press
procedure
roll
sketch
smooth
stamp
stick
stir
trace
trim
varnish
wipe
wrap

Drama:

act
clasp
correct
cross
direct
display
emit
enter
exit
express
leave
move
pantomime
pass
perform
proceed
respond
show
start
turn

Language:

abbreviate
accent
alphabetize
argue
articulate
capitalize
edit
hyphenate
indent
outline
print
pronounce
punctuate
read
recite
speak
spell
state
summarize
syllabicate
translate
type
verbalize
write

Mathematical:

add
bisect
calculate
check
compound
compute
count
derive
divide
estimate
extrapolate
extract
graph
group
integrate
interpolate
measure
multiply
number
plot
prove
reduce
solve
square
subtract
tabulate
tally
verify

Music:

blow
bow
clap
compose
conduct
finger
harmonize
hum
mute
play
pluck
practice
sing
strum
tap
whistle

Science:

calibrate
compound
connect
convert
decrease
dissect
graft
grow
increase
insert
lengthen
light
limit
manipulate
operate
plant
prepare
reduce
remove
replace
report
reset
set
straighten
time
transfer
weigh

Social:

accept
agree
aid
allow
answer
buy
communicate
compliment
contribute
cooperate
disagree
discuss
excuse
forgive
greet
guide
help
inform
interact
invite
join
laugh
lend
meet
offer
participate
permit
praise
react
relate
serve
share
smile
supply
talk
thank
volunteer
vote

Physical:

arch
bat
climb
coach
coordinate
critique
float
grip
hit
hop
jump
kick
bend
carry
knock
lift
march
perform
pitch
run
score
skate
ski
skip
catch
chase
somersault
stand
stretch
strike
swim
swing
throw
toss

ANALYSIS SKILLS

analyze
appraise
combine
compare
conclude
contrast
criticize
deduce
defend
evaluate
explain
formulate
generate
induce
infer
paraphrase
plan
present
save
shorten
structure
switch

SYNTHESIS SKILLS

alter	predict	rephrase
change	propose	restate
design	question	restructure
develop	rearrange	retell
discover	recombine	rewrite
expand	reconstruct	signify
extend	regroup	simplify
generalize	rename	synthesize
modify	reorganize	systematize
paraphrase	reorder	

2. Level of Achievement: a phrase which specifies the standards or criteria against which the outcome will be measured; (how well is it to be achieved?). See below:

...at least ( ) % correct or complete

...at least ( ) % out of ( ) correctly

...at least ( ) consecutive correct solutions

...with increased accuracy over ( ) repeated trials

...with no more than ( ) exceptions/misplacements

...accurate to three decimal places

...meeting standards cited in the ( ) manual

...meeting minimum Junior Olympics scoring requirements

...sportsmanlike in the perception of every opponent

...as judged by the majority of his peer/qaulified observers

...with no pregnant pauses or redundancies

3. Conditions of Evaluation: a phrase which describes the conditions to be held constant when determining whether the objective has (or has not) been achieved; (under what circumstances will it be achieved?).

A checklist of questions regarding frequently occurring relevant conditions of evaluation is below.

Is special equipment to be provided?

Are certain environmental factors important?

Are time limitations imposed? If so, are they relevant to the task?

Is access to references allowed?

Does he/she have a number of chances to perform?

Are multiple evaluations to be made on a schedule?

Will you want the performance in written, oral or demonstration form?

Does the material provided have unique characteristics which warrant special description?

Will the learner respond along, or as a member of a group?

May the learner interact with peers before performing alone?

Is the learner allowed to set his/her own circumstances?

PLANNING AND PRODUCING LEARNING
ACTIVITIES PACKAGES

Activities Schedule

Day 1

I. Introduction - Pre-Test - Participant Survey - Schedule
Explanation of a LAP concept and demonstration
Develop Rationale and Objectives

II. First Series of Demonstrations

A. Scripting and Storyboard
1. idea
2. treatment
3. visual representation
4. storyboarding
visual
captioned

B. Simple Slide Making with the Ektagraphic Visual Maker

1. planning slides
2. camera and kit operations
3. title making
4. close-up 3-D
5. changing or using color

III. Open Lab Time for the Rest of Session

A. Work on Individual Projects
B. Consult with Instructors

Day 2

I. Opening Discussion, Questions, Problems, Etc.

II. Second Series of Demonstrations

A. Handmade Transparencies and Masters

1. planning the transparency
2. lettering, wax pencils, felt-tipped pens, dry transfer
3. color enhancing transparencies
   - color adhesive
   - colored tapes
   - magic markers
   - dry transfer letters
4. mounting a transparency
5. adding an overlay to a transparency

B. Thermofax or Heat Transfer Transparencies

1. handmade masters (carbon based)
2. commercial masters
   - altering the masters
3. masking techniques

C. Lettering Techniques and Simple Design

1. felt tipped pens, free hand
2. stencils
3. dry transfer
4. mechanical lettering
5. cut out and font lettering (letteron)
6. planning a graphic
7. elements of color, texture, line balance

III. Open Lab Time

A. Work on Individual Projects

B. Consider Shooting Slides by the end of session - a Top Priority

C. Consult with Instructors

Day 3

I. Opening Discussion, Questions, Problems, Etc.

II. Third Series of Demonstrations

A. Roll Laminating and Colorlifts

1. using the roll laminator
2. how to tell claybased magazines
3. making a colorlift transparency
4. mounting a colorlift transparency

B. The Dry Mount Press

1. equipment
2. dry mounting and match cut
3. chartex backing, hinging
4. laminating with the dry mount
5. laminating oversized press materials

III. Open Lab Time

A. Work in individual Projects

B. Consult with Instructors

Day 4

I. Opening Discussion, Questions, Problems, Etc.

II. Evaluation Procedure of the LAPS

III. Making an Audio Tape

1. equipment operations
2. voice reading
3. music recording
4. mixing
5. transferring reel to reel tape to cassette

IV. Open Lab Time

A. Work on Individual Projects

B. Consult with Instructors

C. Work on Evaluation Measures for the LAPS

Day 5

I. Open Lab Time

Wrap up for projects

II. Learning Activities Package

Each participant displays their package for others

III. Presentation of Learning Activities Packages

IV. Evaluation

NOTE: Participants interested in producing a super 8 film or using the 35mm copystand may make arrangements with the instructors.

Activities

The activities are the heart of the LAP, they are experiences that lead the student to accomplish the objectives.

Two kinds of activities can be offered in the LAP, those required and activities that the students can choose. They should also provide an opportunity for students to learn in the best way for them. Therefore different approaches in activities should be provided to allow for different student learning styles both in levels and types of activities.

In choosing the different types of activities that will be included in the LAP, consider commercially available materials as well, such as filmstrips, tape recordings, books, etc.

Students need to be involved in their learning process and be more responsible for their own learning. Activities could be developed by students themselves for those students with a particular interest, they should be allowed to write a proposal outlining their activities to meet the LAP objectives.

Activities must involve students in <u>doing</u> as well as <u>receiving</u>. Many of the school activities are considered <u>intake</u> learning experiences. These are activities such as viewing, observing, reading, etc. To provide for a well rounded learning experience, choose a variety of activities from each of the following learning categories: intake, organizing, demonstrating and expressing and creating.

> <u>INTAKE</u> of information, usually a path of experience such as viewing, observing, etc.
>
> <u>ORGANIZING</u> information that has been internalized in anticipation of being used such as map making, outlining, etc.
>
> <u>DEMONSTRATING</u> what they've learned, displaying new skills such as discussions, murals, etc.
>
> <u>EXPRESSING AND CREATING</u> an original product where the newly acquired material is used to synthesize a new product.

All four of these types of activities are essential if learning is to take place (see chart next page for further examples).

In Summary:

1. Activities must be related to objectives
2. A variety of options should be made available
3. Let students create their own activities
4. Provide a variety of levels of activities
5. Provide activities from intake, organizing, demonstrating and expressing learning categories
6. Instructions for the LAP must be explicit

DEVELOPING LEARNING ACTIVITY OPTIONS

There are numerous methods and techniques which can be employed to enable a youngster to learn. One contemporary approach to education is to provide the youngster with several options to choose from in determining how he is going to proceed on his learning journey. When formulating Learning Activity Options, there are four points which must be considered:

1. The instructions must be explicit in delineating what the student is to do. If certain options are required, then they should be so designated. No more than 40 percent of the total number of options should be required for initial completion by the student, so that in case he is to be recycled through the Unit at some future time there will be ample Learning Activity Options for him to complete the second time around. In all cases, the student should be instructed to check off those options which he selects for completion.

2. The options should be written on several different reading levels.

3. The options should be developed so that they will serve as an aid to the student in reaching the stated Behavioral Objectives.

4. There should be a variety of options, including reading assignments and learning through acting, writing, listening and observing.

The following are recommended for the development of Learning Activity Options. Each option may be dealt with in a number of different ways. Most of the suggested individual options can be broken down in at least ten or twenty different ways. Many of the options may be developed, then the initial option required for completion by the student to start the chain of progress must be designated.

Acquiring Knowledge Through Action (Doing)

1. Simulate a Real Life Experience

By simulating a real life experience, the student actually places himself/herself in the role of the person involved in a particular situation. The student might be asked to play the role of the mayor of the community, an astronaut on the way to the moon, a teacher in a classroom, or the President of the United States. Once the student has been instructed to assume a role, he/she is then presented with a particular situation to determine how he/she, in the role, would respond to one or more problems.

2. Visit and Take Part in a Real Life Situation

This option can provide a student with the opportunity to be invovled in history-making or occupationally predictive events. For example, the student might travel with a newspaper reporter to eyewitness certain events; he/she might visit an excavation site to learn how a building or bridge is built; or he/she might volunteer to do some work with a social agency. There are a number of

situations like these which come readily to mind. Of course after the student's participation in a real life situation, he/she should be required to make either an oral or written presentation, or complete a test designed to examine the quantity and quality of his/her learning in the particular learning venture.

3. Perform Some Type of Exploration

Students selecting this option might be asked to explore some location which is pertinent to the subject area under study. This might include an exploration of the dumps, visiting a community, exploring the remains of some ruins, or a host of other situations which demand exploration. The student might also explore maps, charts and graphs, etc.

4. Perform Some Experiment

Students might be required in the Learning Activity Options to conduct certain experiments and observe the results. It should not be assumed that this option is confined to the study of science, for it can present viable opportunities to learn in the subject areas of mathematics, social science, and almost any other area of interest. For example, if the teacher wishes a student to discover how a message is changed as it is transmitted from person to person, he/she might direct the student to recite a message to a designated person who would then reroute it to another person. The performance might be repeated down a row of ten students. The student would then check to see how the content of the message had been changed as well as the interpretation which the last student had received before he/she gave the teacher an explanation for changes in the verbal transmittal of a message. Another experiment might consist of having a student place himself about three paces from a wall before bending his trunk towards the wall unti he is positioned at an approximate 90 degree angle. He should then be instructed to try to pick up a chair which has been placed immediately beneath him and then attempt to rise. Continuing with the experiment the student would be directed to ask a female student to duplicate the experiment. The student would then be called upon to explain the difference in the results while providing supportive elaboration on the cause of the difference.

5. Conducts a Survey

This option is one which is usually well received by students at the secondary level. However, students at the lower levels are by no means precluded from selecting this option for they, too, are well able to carry out such an assignement. The student may be required to choose a subject or problem which he/she feels should be investiaged within the community. He/she might then be committed to devising a questionnaire survey format to obtain and record the reactions of the subjects he chooses for his/her sampling. This survey should, of course, include some of the school population, as well as have content which relates to some subject under study in the school curriculum.

6. Take Photographs

This particular option is usually well received by students. No doubt this can be attributed to the fact that students are permitted to take photographs of any subject which interests them provided that it revolves around or can be integrated into a particular subject area. When the photographs have been taken, the student may be required to put "captions" under the photos. Another appealing project might entail the preparation by the student of a

"picture book." There are a number of different assignments which may be given to the student who selects this option.

7. Go on an Excursion for the Purpose of Acquiring Information

An option which might be stimulating to some students would involve taking an excursion to a particular place of interest in order to obtain different kinds of information. There is a wide range of sites to choose from and these might include the post office, the public library, the museum, the police station, the fire house, another school, a shopping center, etc. However, taking an excursion means getting parental permission and may well involve some expense, so this option should be well prepared in advance.

8. Create an Exhibit

This option, while it does have certain limitations, may be used to stimulate a group of students pursuing the same unit of study to arrange for an exhibit of some of the work which they have prepared. This option can be undertaken in almost any area, including science, social studies, language arts, mathematics, etc. In fact, the teacher should try to incorporate this option into all areas, as often as possible, because it does serve as a motivating device.

9. Undertake Role Playing to Enact Problems, Events and Concerns

The student or students who select this option may be given a problem to dramatize by role playing. For example, to simulate the interviewing process, one student might role-play the employer while another student may assume the role of a teacher presenting a lesson to the class. One creative teacher devised a role-playing option in which the student assumed the role of the mayor of the community and interviewed several community citizens to ascertain their views of the most pressing problems in the community.

10. Make a Film

Students will enjoy making a film. This option might be completed in almost any given subject area. To perform this task, a number of students must opt for this activity to form a team of individual members assigned to different functions. For example, a student-writer will be responsible for creating a suitable script. Perhaps two or more may be necessary, each of them working in unison on various sections of the film. If film scripts are going to be written, then one or several student-photographers will be responsible for taking pictures. If an 8 mm or a 16 mm camera is going to be used, then one or several student-camera persons will be needed. Someone who is proficient in art work may be needed to offer guidance to student-artists engaged in making scenarios, signs, etc. Several student-engineers may also be needed to tape various portions of the film. A student crew of lighting "experts," technicians, make-up artists, carpenters, and many other assistants may be necessary which will provide maximum opportunities for involvement by a host of youngsters participating in the experience of film-making.

11. Collect Descriptions, Reports, Interviews and Responses to Questions

This option might require the student to collect materials which would aid in the educational process. The fact that he/she has to collect the information and use the Thought Process of Translation certainly will enable him/her

to learn about the Unit. The student might be required to write a brief report to be distributed to other students relaying information obtained from reports and interviews.

12. Build Scale Models and Drawings

Because of the extensive amount of time which this option might entail, it should be utilized sparingly. A group of students might be required to build a scale model of the Shakespearean stage, or individual students might design and plan illustrations for the script of a dramatic presentation in which the studetns wish to be involved. This particular option has demonstrated effectiveness in English, Mechanical Drawing, and Industrial Arts; however, it obviously can, with some ingenuity, be employed in othrer areas.

13. Hold a Group Discussion

Students who select this option might be grouped by interest and asked to discuss a common topic. The option might direct the group to select a chair person and a recorder. The chair person would keep the discussion from becoming disorderly and the recorder would be responsible for maintaining a summary of the discussion.

14. Use of Educational Games

This particular option has far-reaching educational implications. Part of this may be attributed to the fact that more and more of the large educational publishing firms are allotting vast sums of money to the production of educational games for the market. Many of these games utilize the technique of role playing in order that the student can assimilate certain conditions which exist. One such game is the Manchester Empire, published by Educational Development Corporation, Brattic Square, Cambridge, Massachusetts. Some creative teachers have also developed their own games to help reinforce learning in their subject area. There seems to be little doubt that most progressive schools of the future will make extensive use of educational games to enhance learning.

15. Use Community and Governmental Resources

To complete this option, the student might be required to visit a number of community and governmental resources to obtain information pertintent to the subject area he/she is studying. These might include the local post office, courthouse, police station, fire house, Internal Revenue Service, etc. Long range plans might include a trip to some fairly distant place such as the Federal or State capitols to visit the offices of government located there.

Acquiring Knowledge Through Writing

1. Write Short Stories, Articles, Speeches

Students who select this option are given the opportunity to exercise their literary skills by developing a short story, an article, speech or other literary production which displays their writing talents. As a part of this option, the student should also be required to tape the short story or speech. In addition, a better evaluation of the student's talent might be made were the student required to deliver the speech before an audience of his peers.

2. Write Letters, Thank You Notes

This option might require a student, who had previously chosen an option of interviewing a noted personage, to write a "Thank You" letter expressing appreciation for the person's cooperation. Teachers have been using this teaching technique for years, and it should continue to be a favorite of students.

3. Prepare an Agenda for a Meeting

This option may also be progressively geared to dovetail and lead into another option. The student may be requested to prepare an agenda for a meeting with a noted person over the Speakerphone, an agenda for a field trip, or an agenda for a Parent-Teacher meeting. There are a number of varied meetings for which a suitable agenda might be suggested and devised by students to eventually serve as teaching-learning devices.

4. Write Script for Plays, Operas, Radio or Television Dramas

This option has limitless possibilities. Students who have selected the option might be required to meet as a group and decide on a script for either of the dramatic presentations mentioned. Various members of the group might then be delegated the task of preparing different portions or sections of the script. An obvious adjunctive option would be the arrangements for dramatization and live presentation of the script.

5. Prepare Radio and Television Programs

In this option, the student would be asked to prepare a program which is pertinent to a unit of study and might be televised or broadcast. Students are fascinated by hearing their voices and seeing themselves; therefore, the wise teacher should capitalize on this by insisting that the students produce quality work which might be broadcast or televised.

6. Prepare a Lesson to Be Given to a Group in Class

One of the best methods by which a student may learn a particular lesson is the activity of learning by teaching. The student would prepare himself/herself to teach a lesson to another class of younger children, or to instruct a large body of students on a subject with which he/she is thoroughly familiar and therefore is well equipped to teach. This student would first be required to prepare an outline of his lesson to be submitted to the instructor for initial approval. When he/she has received this approval, he/she would next write out the content of the entire lesson to be presented. The student might also be responsible for devising an examination to be administered after he/she has presented the lesson. The development of a school program of "student teaching-learning" which would involve a group of several students being responsible for teaching a number of sessions might also be a very meaningful option in this category.

7. List Questions of Interest for Individual and Group Use

This option permits the student to use his/her Thought Process of Evaluation to list questions of interest which should be pursued in order to gain relevant information about a certain subject or topic. In this option, the student

might list his own questions to serve as an evaluation of his/her progress through the Unit. A number of students participating in a group might list questions which they themselves should be able to answer if they are going to learn the Unit.

8. Prepare an Outline for Individual Activities

In this option, the student might be required to prepare an outline for an educational activity dealing with attitudes. This kind of progressive option would serve to lead into another option capable of providing substance in the Unit and reinforcing learning.

9. Prepare Programs for Sharing with Others

Students selecting this option might be required to develop some program pertinent to a particular unit of studies which could then be shared with other students. Such a program could very well be a public relations program for the school, a progress report program for parents, or a host of other programs either about the school or events in the community.

10. Develop a Plan or Scheme

Here, a student might be required to devise a plan or scheme for accomplishing some activity. This might involve developing an improved plan for exiting from school buildings in the event of fire, a scheme for the operation of some educational machine, a plan for classroom management, a plan for cleaning up the classroom, a plan for keeping notes, or a plan for helping others. There are numerous ways in which this option might be developed for reinforcing learning.

11. Prepare Maps, Charts, Tables or Diagrams

In order to reinforce learning, a required option might very well be for the student to devise a map, a chart, tables, or a diagram pertinent to the Individual Study Unit. This option might also be used as a means of determining how well the student comprehends the Unit.

Acquiring Knowledge Through Reading

1. Read a Book, Magazine or Newspaper Article, Reference or Supplementary Reading Materials.

This will probably be the most widely used option of all. Students may be directed to read any materials, from the labels on cans of foodstuffs to certain features of the Wall Street Journal. The teacher must be thoroughly cognizant of the student's reading ability when making such assignments to insure that the suggested materials are not too difficult for the student's comprehension. One technique which has been used successfully by a creative teacher is to require a student to read a short story and then rewrite the theme of the story, substituting the student's community and his friends as the main characters. A student might also be asked to do comparative research by reading an article on the same subject reported on by the three most commonly read local newspapers; or he might be asked to isolate an article

which was not reported on in one of the newspapers and prepare his own written "report" of it for that newspaper. A student might also be asked to do research reading from several sources in the library or instructional materials center to secure documentation for a report he/she is required to submit under a preceeding option.

2. Do Research in the Library

This option may be used for any subject area, and the learning activity might involve a search by the student for some information pertinent to his/her area of interest in a library or instructional materials center. This option will not only serve as an aid for the student in learning how to use the library or instructional materials center more effectively, but it will also give him/her confidence when other occasions arise where it is necessary for him/her to research other information. A student might be asked to determine the number of students attending elementary public schools in the community and in the state for the 1979 school year. However, at no time should the teacher give directions to the student as to the particular reference work which would most likely have the information he/she is seeking. A very important aspect of this option is the resourcefulness which the student is called upon to utilize in obtaining the information sought.

Acquiring Knowledge Through Listening and Observing

1. Contact a Noted Personage on the Speakerphone

This technique, which is highly contemporary in character, has been extremely useful in contacting various persons for a conversation where it has been, in the past, well nigh impossible to reach such persons. When this option is included as a choice, prior arrangements should have already been made. A prior appointment with the "noted personage" may be made either by telephone or written correspondence. This option may involve some expense, depending upon where the call is directed. Therefore, it is economically feasible to make provision for a number of students to participate in the interview rather than restricting it to a single student.

2. Visit a School, Museum, Municipal Building or Art Gallery

This option offers the student an opportunity to visit a school, museum, municipal building, art gallery, or any place where he can ascertain information relevant to his/her studies. More and more schools are making better use of these resources to provide better and more varied educational opportunities for students. In Philadelphia, Pennsylvania, the Philadelphia School District has initiated an educational program in which students attend a number of "outside school" educational facilities to continue their education, such as museums, newspaper offices, etc. By special arrangements, students may prevail upon the authorities for the use of these public facilities for a period of several days rather than several hours. These "outside school" education ventures have been found to be generally attractive to students.

3. Attend a Conference, Forum or Seminar

This option will permit a student or several students to attend some event which is pertinent to a particular Individual Study Unit. The student or students might be required to report the salient parts either to a group of

interested students, parents or to the teacher. Since this option may include some expense for transportation and incidental costs, it should be planned well in advance. A possible assignment within this option might be taping the discussion and subsequently writing a brief report to be distributed to the class or the entire school population.

4. See a Play, Musical or Opera

This option provides the youngsters with an opportunity to view a play, musical or opera which should be related to something which is being studied in school. For example, if Hamlet is the subject under study, this option would certainly enhance learning if the student found it possible to attend the theatre and see this or another Shakesperean play. This option will require additional cost to the students and may be difficult to implement in a poor community.

5. View a Television Program, a 16 mm Film, or a Movie Mover

This option requires the student to view television or a 16 mm film before completing a test or preparing a report on what he has seen. The Movie Mover has met with much success in a number of schools throughout the country. Because it provides maximum utilization of costly 16 mm film and projectors which were previously stored in a "visual aids room" for 90 percent of the time. With the use of the Movie Mover, 16 mm projectors can be operated to allow a single student to see and hear without disturbing other classmates in the same room.

6. Interview a Resource Person for Information

This option requires that the student interview someone to obtain information, and presents a wide range for choice. The student might interview a doctor to get information on narcotics; he/she might visit the office of an accountant to learn something about depreciation; or he might visit an insurance broker for information about the different types, purposes and costs of various insurance policies. In addition, the County Clerk is an invaluable source to go to for information about the student's community. This option offers an unlimited range of possibilities upon which the creative and imaginative teacher can build.

7. Visit a Television or Radio Station

This option may require a visit by the student to a television or radio broadcasting studio to observe a program which is pertinent to a lesson under study. He/she may also be required to participate in the program to some extent if such arrangements can be made in advance with the broadcasting company.

8. Utilize the Tools of Educational Technology

This option has unlimited use. There are literally hundreds of educational machines which do hosts of things both intricate and simple, such as responding to a human command or reacting to an incorrect response. An individualized instructional program cannot possibly survive without the use of some educational technology. A major point of concern, however, is that there be a variety of machines and equipment to enhance the learning program

and to afford students the choice of a multitude of different methods and techniques to learn. At the elementary level, the Language Master has been used quite successfully, while the Audio-Tutor has met with success at the secondary level. These are only two of the vast number of machines which have achieved good results. When the teacher is constructing an option for the use of educational technology, he/she should make certain that all instructions are very clear as to what machines to use, what accoutrements, such as tape or film, are to be utilized in the machines, and where the machine and these materials are located. The major advantage of the educational machines lies in their versatility, for they can be used to teach, instruct, test or help the student to evaluate his own program.

9. Utilize the Learning Center or a Laboratory

Most modern and progressive schools have made provisions in the physical plant for learning centers and laboratories. Where this is the case, students may be directed to these places to receive instructions or make observations of a specialized nature.

SUMMARY

Learning Activity Options are an essential and important part of any individualized instructional program. Appropriately developed options will generate and maintain interest, introduce relevancy, provide consideration of human variables, enable the student to have a voice in what and how he/she will learn, as well as permit him/her to assume some responsibility for most of his learning. The activities which a student may engage in through the selection of Learning Activity Options may be broken down into four categories:

1. Acquisition of knowledge through action;
2. Acquisition of knowledge through writing;
3. Acquisition of knowledge through reading;
4. Acquisition of knowledge through listening and observing.

Since the major responsibility of the educator is to reinforce learning, it may be said that the Learning Activity Options are the core of an individualized instructional program.

EXAMPLES OF LEARNING ACTIVITIES IN EACH CATEGORY

	Intake*	Organizational*	Demonstrative*	Creative*
READING	books	outlining	role-playing	solving problems
	articles	chart-making	discussing	inventing new uses for this
	magazines	graphing	writing	composing songs or poetry
	newspapers	mapping	drawing	writing essays or stories
	dittoes	time-line building	question-asking	role-creating
	labels	diagramming	reporting	mimicking
	advertisement	arranging	explaining	painting
	circulars	note-taking	analyzing	writing fiction
	pamphlets	filing	generalizing	question-forming
	handbills	question-answering	building	cartooning
	posters	question-asking	singing	hypothesizing
	experiment	stating	dancing	predicting
	films	re-stating	modeling	drawing
	slides	building	describing	singing
OBSERVING	filmstrips	summarizing	debating	dancing
(looking,	pictures	writing	photographing	photographing
watching,	drawings	identifying	reacting	proposing
seeing,	paintings	categorizing	story-telling	building
photograph-	photographs	choosing	preparing murals	creating a mural
ing, etc.)	people	recording	applying	discussing
	buildings	expe imenting	sketching	
	television	ordering	choosing	
	records	sorting		
	guest speakers			
LISTENING	lectures			
TO	music			
	debates			
	discussions			
	radio			
	objects			
	artifacts			
TOUCHING	buildings	TASTING	foods	
	natural environment		liquids	
	speakers			

* Some activities legitimately fit into more than one category, depending on the purpose behind the activity.

Evaluation of Workshop Participants

Successful completion of the program will be based upon the Learning Activities Package produced by each participant. Each LAP should contain all the media software completed in Objectives 1 through 16. All software produced should satisfy an objective of the LAP and be of an acceptable quality as established by the instructors.

EVALUATION PROCEDURES

Evaluation is an important part of the implementation of any instructional program. It breaks into two basic areas: student assessment, which monitors the student's progress and program evaluation, which attempts to measure the effectiveness of the materials and presentation.

OUTLINE OF MATERIAL TO BE COVERED:

I. STUDENT ASSESSMENTS

- directly related to the objectives

- tests both student's progress and effectiveness of program

A. Types of Student Assessments

1. Formal

a. Pre-Test - will determine student's track within the program or their need for the program.

b. Post-Test - should be consistent with the pre-test as to format and objectives tested, although actual questions may vary.

(1) a post-test may be given all at once or at the conclusion of each objective.

2. Informal

a. subjective teacher judgements

b. review of student records

B. Using Different Evaluation Mediums

1. Slide/Tape (eg. a drill sequence, or question-response-answer series, etc.)

2. Transparencies - for group drill, identification, etc.

3. Pencil and Paper Test

4. Audio Tape - combined with answer sheet

5. Picture Identification -

6. Physical Performance - of skill

7. Observed Behavioral Change

II. PROGRAM EVALUATION

A. Why Evaluate Your Program?

Before industry markets a product, it is tried out and revisions made based upon its performance. The same care should be applied to any materials prepared for the classroom.

Materials should be evaluated for both effectiveness and acceptance, then modified in accordance with the results of the evaluation. An ongoing program of re-evaluation will help to weed out weak points in your materials.

Some evaluation will be based upon personal observations. At other times, one may wish to utilize more formalized evaluations such as student's tests and comments.

Consistently poor student performance in one area taught by materials does not indicate mass ignorance, but rather a weakness in program. It is the rare person who creates the perfect product on the first try.

B. How to Evaluate Your Program

Evaluations can take several forms, they can be the informal observations of the instructor or other observers. Often this type of evaluation will relate more to the student's reactions.

A more formalized approach to program evaluation would be through the use of forms questioning the students about various aspects of the program.

The most objective means of evaluating a program would be an item analysis of the student's post-tests. This method can pin-point specific weak spots within the program, and allow the instructor to revise specific objective related activities.

METHOD: Teacher Demonstration and Discussion

Mediating Learning Packets

Course Evaluation Form (A)

Circle the response which best describes your feelings about this workshop.

SA - Strongly Agree
A - Agree
U - Undecided
D - Disagree
SD - Strongly Disagree

1.	This program appeared to be well-planned and organized.	SA A U D SD
2.	The classroom climate of this program was participant centered rather than instructor dominated.	SA A U D SD
3.	The instructions in this program were open to participant suggestions and recommendations.	SA A U D SD
4.	The instructors appeared "Well Prepared".	SA A U D SD
5.	The amount of time spent on production demonstrations was adequate.	SA A U D SD
6.	The demonstrations were clear and concise.	SA A U D SD
7.	The workshop time allowed for "hands on" experience by the participants.	SA A U D SD
8.	More academic assignments (required readings, papers, etc.) would have made this program more meaningful.	SA A U D SD
9.	This program improved my understanding of how to mediate a learning activities packet.	SA A U D SD
10.	This program improved my ability to use effectively my materials after I produced them.	SA A U D SD
11.	The directions, organization and schedule were clear and easy to understand.	SA A U D SD

12. My overall accessment of this program was:

favorable unfavorable

Mediating Learning Packets
Course Evaluation Form (C)

1. The most worthwhile aspects of this in-service program were:

2. The least worthwhile aspects of this in-service program were:

3. If I could change any aspect of this in-service program, I would